

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 07/13/00

Date Received: 06/22/00

Project: Metro Self Monitor, PO# M64453

Date Extracted: 06/29/00 and 07/11/00

Date Analyzed: 06/29/00 and 07/12/00

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M64453 006096-01	0.23	0.13	0.23	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 07/13/00

Date Received: 06/22/00

Project: Metro Self Monitor, PO# M64453

### QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 006121-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Copper	mg/L (ppm)	<0.05	<0.05	nm	0-20
Nickel	mg/L (ppm)	0.05	<0.05	nm	0-20
Zinc	mg/L (ppm)	<0.05	<0.05	nm	0-20

Laboratory Code: 0062121-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Copper	mg/L (ppm)	5	<0.05	105	103	80-120	2
Nickel	mg/L (ppm)	10	0.05	114	117	80-120	3
Zinc	mg/L (ppm)	5	<0.05	120	126 vo	80-120	5

Laboratory Code: 006096-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.22	0.23	4	0-20

Laboratory Code: 0062096-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	0.22	101	83	80-120	20

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	90	91	80-120	1
Copper	mg/L (ppm)	5	107	106	80-120	1
Nickel	mg/L (ppm)	10	106	108	80-120	2
Zinc	mg/L (ppm)	5	104	110	80-120	6

vo - The value reported fell outside the control limits established for this analyte.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.  
3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 825-8282

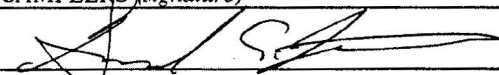
006096

SAMPLE CHAIN OF CUSTODY

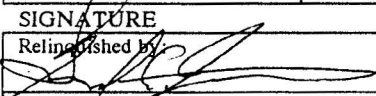
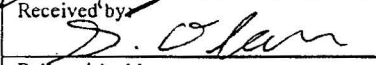
KT A52  
June 22, 2000  
1:20 PM

Send Report To:

Company Alaskan Copper Works Contact Gerard A. Thompson  
Address 628 Alaskan St  
City, State, Zip Seattle WA  
Phone # 206-382-8379 FAX # 206-382-4309 Date 6-22-00

SITE NO.	PROJECT NAME	PURCHASE ORDER #
7238	Metro Self monitor	M 64453
SAMPLERS (signature)		PROJECT LOCATION
		3200 6th Ave S.
REMARKS		SAMPLE DISPOSAL INFORMATION
		<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions

Sample #	Date/Time Sampled	Type of Sample	# of Jars	Lab Sample #	Analyses Requested
M64453	6/22/00 12:30	H2O	1	01	CH Cu Ni Zn

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	Gerard A. Thompson	AEW	6/22/00	1:03 PM
Received by: 	S. Oboin	F&B, Inc.	6/22/00	1:04 PM
Relinquished by:				
Received by:				



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

July 13, 2000

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

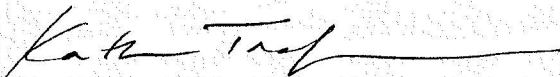
Dear Mr. Thompson:

Included are the results from the testing of material submitted on June 22, 2000 from your Metro Self Monitor, PO# M64453 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kate Trafton  
Project Manager

Enclosures  
ACU0713R.DOC